

## ABSTRACT

### UJI PRESISI METODE PENETAPAN AKTIVITAS ANTIOKSIDAN DENGAN DPPH MENGGUNAKAN PELARUT ETANOL 96%

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This research aims to determine the results of % Relative Standard Deviation (% RSD) on ascorbic acid powder dissolved in 96% ethanol solvent using the DPPH method against the specified precision test requirements. The method used is to measure the amount of DPPH reduced by the antioxidant compound in the form of ascorbic acid using UV-Vis spectrophotometry at a wavelength of 515 – 517 nm. This research was carried out by weighing 10 mg of ascorbic acid powder which was then dissolved in 96% ethanol to reach a sample solution concentration of 100 ppm. The solution was then diluted to concentrations of 1 ppm, 2 ppm, 3 ppm, 4 ppm, and 5 ppm. After that, the absorbance is measured at the maximum wave that has been determined. then repeated 3 times. The results of the research on the antioxidant activity of ascorbic acid were stated with an IC<sub>50</sub> value of 8.435 ± 0.124 with a %RSD value of 1.471%. Then it can be concluded from the sample that the ascorbic acid used has very strong antioxidant activity because the yield is less than 50 ppm and has good precision because the yield is less than 2%. Then this shows that the research results obtained are valid because they meet the validation requirements of the precision test analysis method

**Keyword :** *Ascorbic Acid (Vitamin C), Antioksidan, IC<sub>50</sub>, Precision.*